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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/484,911	01/18/2000	Junichi Hagiwara	1503.63544	1265

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EXAMINER	
FLEURANTIN, JEAN B	
ART UNIT	**PAPER NUMBER**
2172	

DATE MAILED: 01/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/484,911	Applicant(s) HAGIWARA ET AL.	
	Examiner Jean B Fleurantin	Art Unit 2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *RCE, 17 December 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 17 and 18 are added.

Claims 1-18 are remained pending for examination.

Response to Applicant' Remarks

2. Applicant's arguments filed on 12/17/02 with respect to claims 1-18 have been fully considered but are moot in view of new ground(s) of rejection. Examiner discusses the new added claims 17 and 18 in the following rejection.

Claim Rejections - 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukatsu et al. (US Pat. No. 5,781,898) in view of Sakuta (US Pat. No. 5,940,842) ("Fukatsu"), ("Sakuta").

As per claims 1, 11, 12 and 15, Fukatsu teaches a search system as claimed, comprises an inputting device inputting query specification information which collectively specifies a plurality of search condition combinations (thus, process starts when the inputting of the retrieval conditions in the condition input section 11 is completed, the operator inputs retrieval conditions via the condition input section 11 in an interactive manner more specifically when a unit

condition formula is input, the operator is inquired whether to continue or terminate the inputting of a next condition unit, when the operate depresses a button on the keyboard 11a which indicates 'continue' in response to the query, the operator is asked which type the logic symbol in the next condition unit is following by the query for the content of a unit condition formula in the condition unit; which is readable as an inputting device instructing specification information for collectively specifying a plurality of search condition combinations), (see col. 8, lines 41-50), each of the combinations representing any search query which includes a plurality of search conditions for text information (thus, the combination of each unit condition formul and the type and priority order of a logic symbol associated with this unit condition formula, all written in the condition storage section 10, are hereinafter called 'condition unit', the condition display section 12 reads the individual retrieval conditions from the condition storage section 10 and displays the retrieval conditions in a list form; which is readable as each of the combinations representing any search query which includes a plurality of search conditions for text information) (see col. 6, lines 40-48); and

in which text information specified by the query specification information is searched for (thus, displays the retrieval conditions in a list form) (see col. 6, lines 45-48). But, Fukatsu does not explicitly indicate instructing a full text search. However, Sakuta implicitly indicates a coincident character string is found as a result of the full text search, information about the position of the hit search string in the document area 13a, that is information representing the start and end positions of the located character string, (see col. 3, lines 32-38). Further, in

column 4, lines 22 through 25, Sakuta teaches when the full text search is performed, first the character string searching means 14 searches the text data loaded into the document area 13a for a search string. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Fukatsu and Sakuta with the steps instructing a full text search. This modification would allow the teachings of Fukatsu and Sakuta to improve the accuracy and the reliability of the search system and method based on search condition combinations, and provide a character string retrieval system which is able to expand a display range including the located character string both forward and backward in interactive mode in accordance with searcher's instructions (cols. 1-2, lines 65-2).

As per claim 2, Fukatsu teaches the search system as claimed, wherein said inputting device inputs the query specification information in a form of a table (see col. 6, lines 21-36).

As per claim 3, in addition to the discussion in claim 1, Fukatsu further teaches a generating device automatically generating the plurality of search condition combinations based on the query specification information (see cols. 5-6, lines 50-20).

As per claim 4, in addition to the discussion in claim 1, Fukatsu further teaches a changing device changing a portion of search conditions included in the query specification information (thus, for each condition unit, the condition display section 12 displays the logic symbol (or/and/no) logic symbol corresponding to the logic symbol type (2/1/0), and displays the content of the unit condition formula in the next row; which is readable as a changing device

changing a portion of search conditions included in the query specification information) (see col. 6, lines 48-52).

As per claims 5, 13 and 16, in addition to the discussion in claim 1, Fukatsu further teaches an outputting device collectively outputting output information corresponding to the plurality of search results (thus, the display device 2 displays the retrieval conditions before the execution of the retrieval and displays data read as the retrieval result after the execution of the retrieval, which is readable as an outputting device collectively outputting output information corresponding to the plurality of search results) (see col. 5, lines 46-49). Further, in column 6, lines 1 through 3, Fukatsu teaches the retrieval executing section 15 is connected to the database 3, the retrieval result display section 16 is connected to the display device 2.

As per claims 6-7 and 9-10, the limitations of claims 6-7 and 9-10 are rejected in the analysis of claim 5, and these claims are rejected on that basis.

As per claim 8, Fukatsu teaches the search system as claimed, further comprises a reflecting device reflecting a search result regarding a changed portion on the output information when the portion of search conditions included in the plurality of search condition combinations is changed (see col. 5, lines 46-49).

As per claim 14, in addition to the discussion in claims 1 and 5, Fukatsu further teaches performing an information search based on specified information (thus, the range of the unit retrieval condition and logic symbol based on which search is executed with a higher level of priority, such a priority given range includes at least one logic symbol and unit retrieval

conditions located ahead and behind that logic symbol; which is readable as performing an information search based on specified information) (see col. 3, lines 2-7).

As per claim 17, in addition to the discussion in claims 1 and 16, Fukatsu teaches at least one of the search condition types including a plurality of search condition elements (thus, the logic symbol is a information which specifies how to link a plurality of unit retrieval conditions, the logic symbols include "OR (+)," "AND (*)" and "NOT," for example "OR" means the extraction of all data satisfying either the preceding unit retrieval condition or the succeeding unit retrieval condition "AND" means the extraction of all data satisfying both of the preceding and succeeding unit retrieval conditions; which is readable as at least one of the search condition types including a plurality of search condition elements) (see col. 2, lines 57-64).

As per claim 18, in addition to the discussion in claims 1 and 17, Fukatsu teaches multi-dimensional query specification information specifying a plurality of search condition types (thus, the unit retrieval condition is a key for retrieving necessary information from a database, examples of the unit retrieval conditions include the range of the preparation date of data, a keyword, a data creator and the range of a numeral included in data, for example the logic symbol is a information which specifies how to link a plurality of unit retrieval conditions, the logic symbols include "OR (+)," "AND (*)" and "NOT," for example "OR" means the extraction of all data satisfying either the preceding unit retrieval condition or the succeeding unit retrieval condition "AND" means the extraction of all data satisfying both of the preceding and succeeding

unit retrieval conditions; which is readable as multi-dimensional query specification information specifying a plurality of search condition types) (see col. 2, lines 52-64).

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fulton et al. US Patent Number 5,799,184 relates to a system and method for retrieving stored data in response to a specific search query. Fukushima US Patent Numbers 5,940,836 and 6,189,006 both are related to a full text data base retrieving device for memorizing a plurality of texts. Kuechler et al. US Patent Number 5,237,678 relates to the efficient retrieval.

Conclusion

5. Any inquiry concerning this communication from examiner should be directed to Jean Bolte Fleurantin at (703) 308-6718. The examiner can normally be reached on Monday through Friday from 7:30 A.M. to 6:00 P.M.

If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Mrs. KIM VU can be reached at **(703) 305-8449.** The FAX phone numbers for the Group 2100 Customer Service Center are: ***After Final* (703) 746-7238**, ***Official* (703) 746-7239**, and ***Non-Official (703) 746-7240***. NOTE: Documents transmitted by facsimile will be entered as official documents on the file wrapper unless clearly marked "***DRAFT***".

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2100 Customer Service Center receptionist whose telephone numbers are **(703) 306-5631, (703) 306-5632, (703) 306-5633**.

Jean Bolte Fleurantin

January 9, 2003

JBF/

JEAN M. CORRIELUS
PRIMARY EXAMINER